PRODUCT INFORMATION PACKET

Model No: 182TTTS6538
Catalog No: E470
XRI®-SD Severe Duty Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 182T Frame, TENV

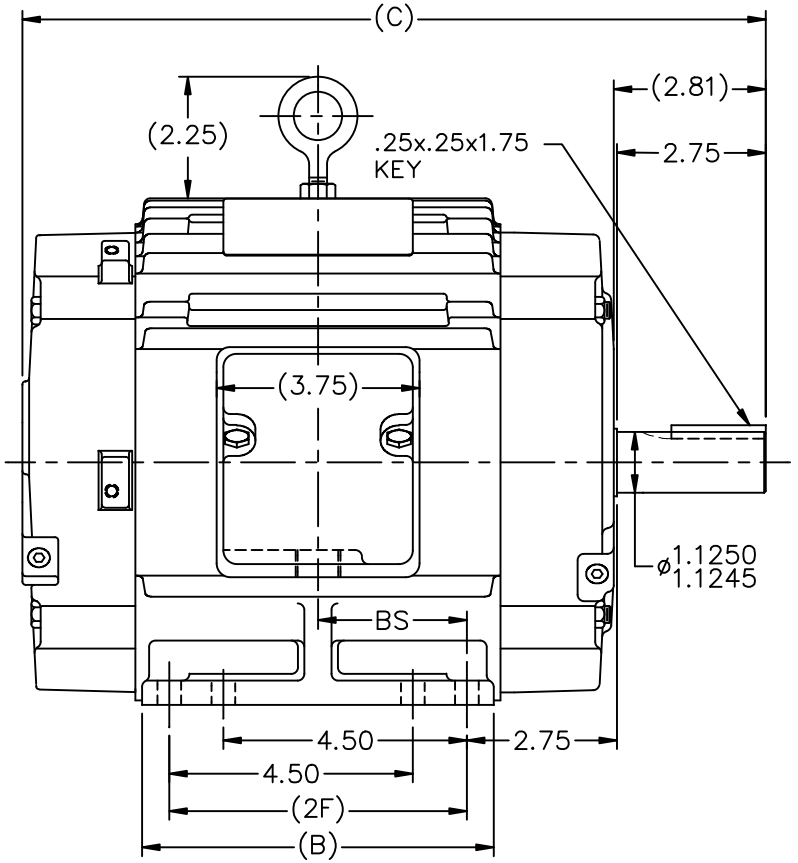
Nameplate Specifications

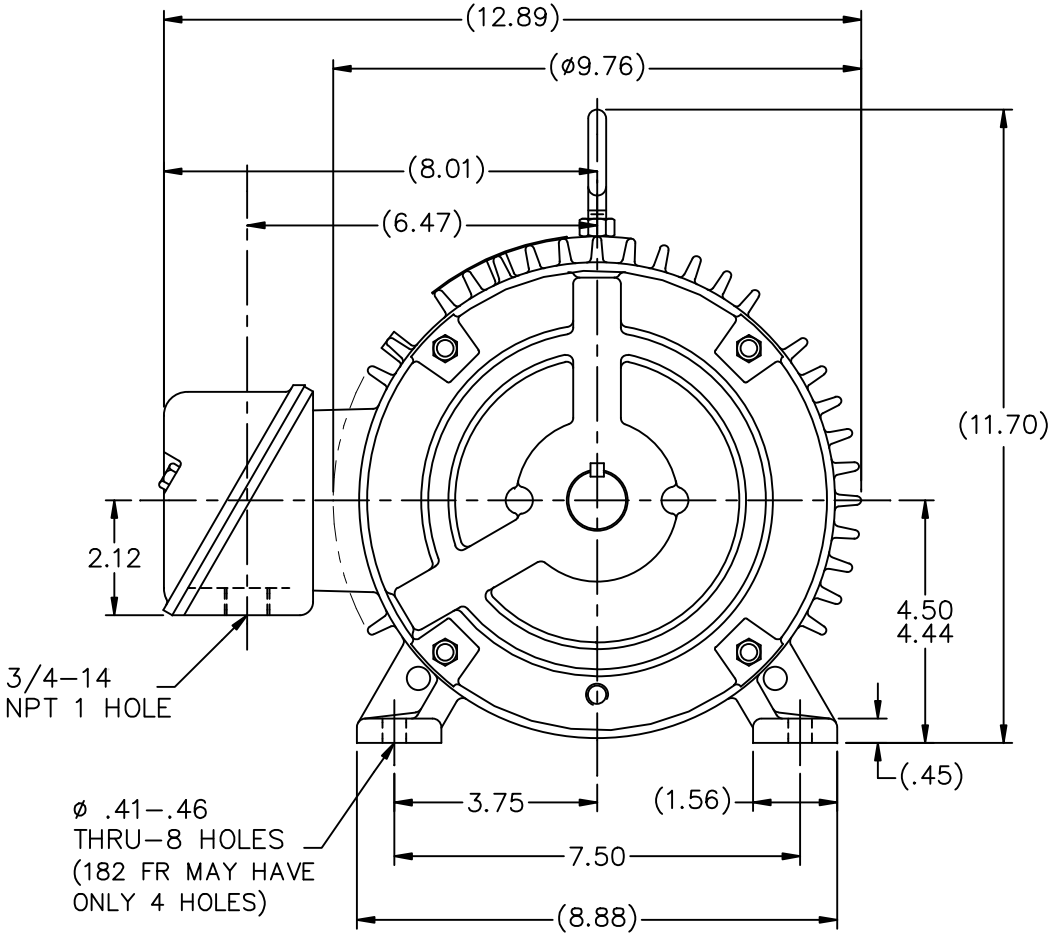
Phase	3	Output HP	3 & 2 Hp
Output KW	2.2 & 1.5 kW	Voltage	230/460 & 190/380 V
Speed	1760 & 1470 rpm	Service Factor	1.15 & 1.15
Frame	182T	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	No Protection	Efficiency	90.2 & 88.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	8/4 & 6.8/3.4 A	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	K
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6205
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1	Hazardous Location	DIVISION 2 T2B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	3.76 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	12.74 in
Frame Length	5.75 in	Shaft Diameter	1.125 in
Shaft Extension	2.81 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 20:1		
Outline Drawing	SS67889-575	Connection Drawing	A-EE7308

SS67889





DASH	FR.	C	B	2F	BS	MOUNTING
575	182T	12.74	5.50	4.50	2.25	F1 OR F2
675	182/4T	13.74	6.50	5.50	2.75	F1 OR F2
800	182/4T	14.99	7.75	5.50	3.38	F1 ONLY

NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

01-17-2000

NO.	REVISION	BY & DATE	CHK
10	REVISED –575 MOUNTING MU98218	SJW 11/9/2010	
9	SHAFT EXT. WAS 2.72 NOW 2.75 CN46656	RJW 03-15-2007	ML
8	ADDED 2F DIMENSION TO DASH 575 CN 33528	TAT 04-01-2004	ML
7	SHOWED PROPER THREAD EXT. LOC. CN 29200–323	TJB 04-10-2000	
6	ADDED –675 W/ 182T FRAME & MTGS. CN 27400–320	CAE 01-17-2000	
5	ADDED FOUR MOUNTING HOLES IN BASE CN 26348	DRS 08-11-1998	

TOLERANCES UNLESS SPECIFIED	
DEC.	INCHES
.X	±.1
.XX	±.03
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

MARATHON ELECTRIC

TITLE OUTLINE
180 FR. – BB – TS – TENV

DRAWN	SMC 10–01–1992
CHK	MOL 10–01–1992
APPD	GK 10–01–1992
SCALE	9=32
REF	
FMF	
PREV	

MAT'L.
FINISH
CAD FILE ss67889
RFP
DIST LB

SIZE	DRAWING NO.	PAGE	OF	REV.
A	SS67889			10

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EE7308

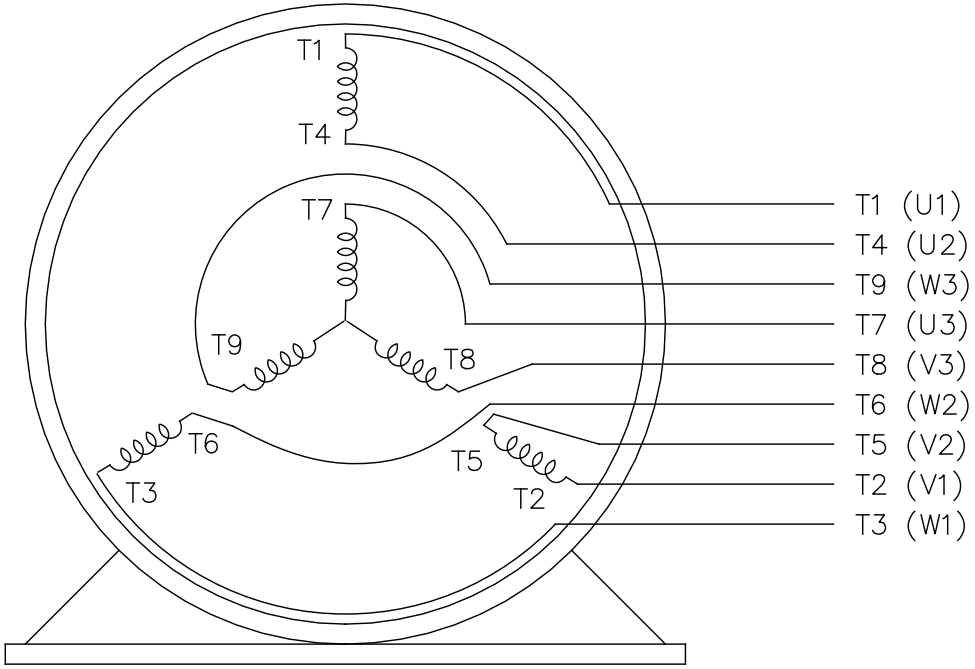
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

NO.	REVISION	BY & DATE	CHK
5	CHG TO REGAL LOGO	SL 09/10/2015	AB
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS
1	REDRAWN	RM 11/20/1990	

TOLERANCES UNLESS SPECIFIED

ANG	DEC.	INCHES
	.X	±.1
	.XX	±.02
	.XXX	±.005
	.XXXX	±.0005
ANG		±7'30"

Regal Beloit America, Inc.

TITLE CONNECTION DIAGRAM
3ø – DUAL VOLTAGE MOTOR

MAT'L.
FINISH
CAD FILE ee7308
RFP
DIST WP

DRAWN RM	11/20/1990
CHK ML	11/21/1990
APPD SAS	04/24/2003
SCALE	1=1
REF	
FMF	
PREV	

SIZE	DRAWING NO. PAGE OF	REV.
A	EE7308	5

CERTIFICATION DATA SHEET

Model#:	182TTTS6538 BR	**WINDING#:**	K1824116 NONE 1
CONN. DIAGRAM:	A-EE7308	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	SS67889-575		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3&2	2.24&1.49	1800	1760&1470	182T	TENV	K	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	8/4&6.8/3.4	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40	3300

FULL LOAD EFF: 90.2&88.5	3/4 LOAD EFF: 89.5	1/2 LOAD EFF: 88.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80&76	3/4 LOAD PF: 75	1/2 LOAD PF: 63	88.5	SQ CAGE INV RATED	3.8 / 1.9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
9 LB-FT	64 / 32	22.5 LB-FT 250	35 LB-FT 389	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.4 LB-FT^2	40 LB-FT^2	25 SEC.	2	90 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6206	BALL 6205	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 20:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

*
NOTES
*

DATE: 06/27/2017 03:52:43 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

182TTTS6538

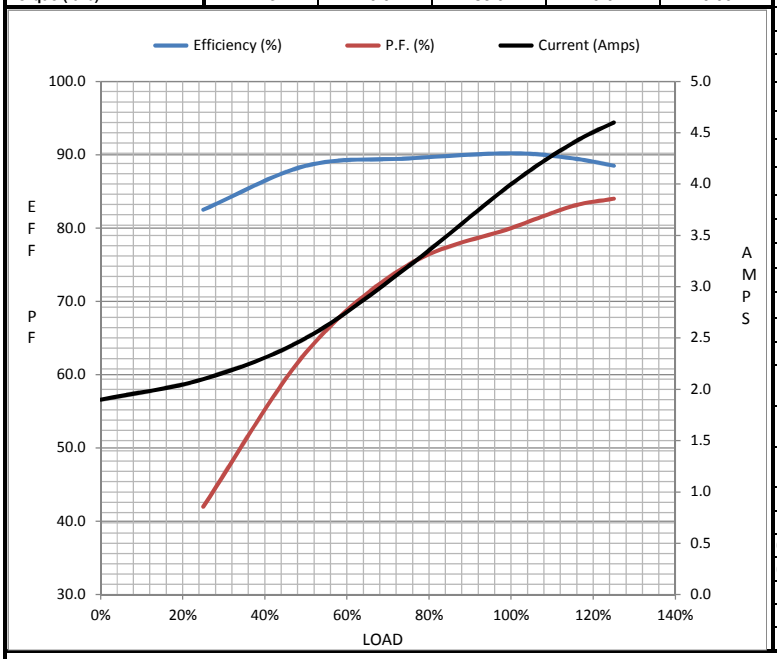
Submittal
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.90	2.10	2.50	3.2	4.0	4.4	4.6	32.0	
Torque (ft-lb)	0.00	2.20	4.4	6.7	9.0	10.4	11.2	22.5	
RPM	1800	1790	1780	1770	1760	1,755	1750	0	
Efficiency (%)		82.5	88.5	89.5	90.2	89.5	88.5		
P.F. (%)	6.5	42.0	63.0	75.0	80.0	83.0	84.0	47.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1500	1760	1800
Current (Amps)	32.0	30.0	23.0	4.0	1.90
Torque (ft-lb)	22.5	20.0	35.0	9.0	0.00



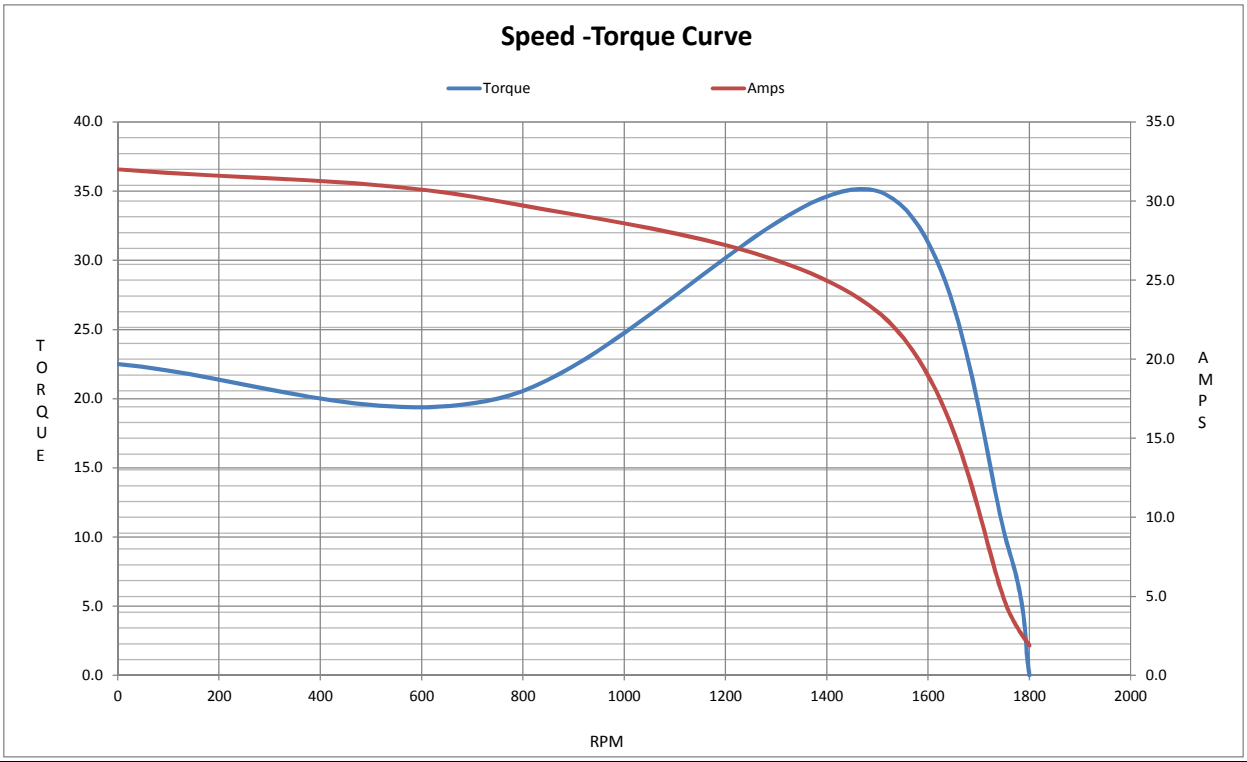
Information Block

HP	3.0
Sync. RPM	1800
Frame	182
Enclosure	TEFC
Construction	TFS
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	B
LR Code letter	K
Service Factor	1.15
Temp Rise @ FL	60 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	0.40 Lb-Ft²
Ref Wdg	K1824116 NONE
Sound Pressure @ 1M	62 dBA
VFD Rating	CONSTANT 20:1
Outline Dwg	SS67889-575
Conn. Diag	A-EE7308
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
2.3530	1.6160	5.0840	7.9000	130.4100

Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 182TTTS6538

(Model No. may contain prefix and/or suffix characters)

Catalog No : E470

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)
EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:

Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:

Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22